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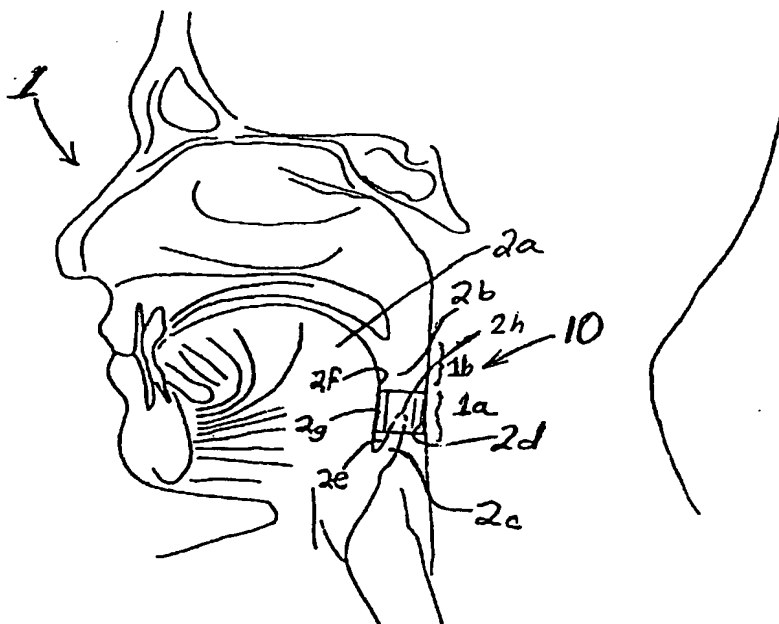
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[Continued on next page]

(54) Title: APPARATUS AND METHODS FOR TREATING SLEEP APNEA



(57) Abstract: An apparatus and method for treating sleep apnea and/or snoring is provided. The apparatus includes an appliance sized and structured to be placed in the pharyngeal region of a human or animal and being effective in treating sleep apnea and/or snoring, for example in maintaining openness of an oropharyngeal region of a human or animal during natural sleep, advantageously while not interfering with normal functioning of the epiglottis. The appliance may be made of a super elastic material, for example, Nitinol, and may be submucossally implanted in the pharyngeal walls.

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## A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 128/848, 898

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 128/848, 898, 897, 200.24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST search terms: sleep apnea or snoring or anti-snoring, pharyngeal or oropharyngeal, nitinol

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,250,307 B1 (CONRAD et al.) 26 June 2001 (26.06.2001), entire document.	1-6, 8-9, 11, 13-15, 19-29, 31-41, 43-65 ----- 7, 10, 12, 16-18, 30, 42
X --- Y	US 6,450,169 B1 (CONRAD et al.) 17 September 2002 (17.09.2002), entire document.	1-6, 9-11, 13-15, 19- 28, 30-41, 44-57, 59- 65 ----- 7-8, 12, 16-18, 29, 42- 43, 58
Y	US 5,355,874 A (BERTRAM) 18 October 1994 (18.10.1994), whole document.	7, 16-18, 42, 45
Y	US 6,358,274 B1 (THOMPSON) 19 March 2002 (19.03.2002), whole document.	10, 17-18, 45
Y	US 5,494,029 A (LANE et al.) 27 February 1996 (27.02.1996), whole document.	10, 12, 30, 45

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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